NATIONAL PROVIDER IDENTIFIER

Issue Paper -- For Discussion Purposes

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This paper presents information and issues relating to the National Provider Identifier (NPI), a candidate for the standard health care provider identifier. This paper is to be used for discussion purposes only. It does not necessarily reflect the official Department of Health and Human Services (DHHS) position on all issues. The official position will be conveyed in a Notice of Proposed Rulemaking (NPRM), to be published in the Federal Register, which will recommend the NPI as the standard health care provider identifier. The NPRM will solicit public comment on many of the issues presented in this paper.

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What is a Health Care Provider?

A health care provider is an individual, group, or organization that provides medical or other health services or supplies. This includes physicians and other practitioners, physician/practitioner groups, institutions such as hospitals, laboratories, and nursing homes, organizations such as health maintenance organizations, and suppliers such as pharmacies and medical supply companies.

Our proposed definition of a health care provider would not include health industry workers who support the provision of health care but who do not provide health services, such as admissions and billing personnel, housekeeping staff, and orderlies.

What is a Health Care Provider Identifier?

In order to administer their programs, health plans assign identification numbers to the providers of health care services and supplies with which they transact business. These identifiers are used for both program management and operations purposes.

Problems with the Use of Nonstandard Provider Identifiers

Provider identifiers are frequently not standardized within a single health plan or across health plans. This lack of uniformity results in single health care providers having different numbers for each program--and often multiple billing numbers that must be used within the same program-- significantly complicating providers' claims submission processes. The lack of a single and unique identifier for each health care provider within each health plan and across health plans, based on the same core data, makes exchanging data both expensive and difficult. In addition, nonstandard enumeration contributes to the unintentional issuance of the same identification number to different health care providers, or the issuance of more than one identification number to the same health care provider.

The Need for a Standard Health Care Provider Identifier

As the health care industry becomes more dependent on data automation and proceeds in planning for health care in the future, the need for a universal, standard health care provider identifier becomes more and more evident. In addition to overcoming communication and coordination difficulties, use of a standard, unique provider identifier would enhance our ability to eliminate fraud and abuse in health care programs.

Early Work on a Standard for a National Health Care Provider Identifier

In July 1993, the Health Care Financing Administration (HCFA) undertook a project to develop a provider identification system to meet Medicare and Medicaid needs and ultimately a national identification system for all health care providers to meet the needs of other users and programs. HCFA convened a workgroup that included representatives from the private sector and Federal and State agencies who shared these same goals.

One of the workgroup's first tasks was to decide whether to use an existing identifier or to develop a new one. The group began by adopting criteria recommended for a unique provider identifier by the Workgroup for Electronic Data Interchange (WEDI), Technical Advisory Group in October 1993, and by the American National Standards Institute (ANSI), Health Informatics Standards Planning Panel, Task Group on Provider Identifiers in February 1994. The workgroup then examined existing identifiers and concluded that no existing identifier met all the criteria that had been recommended by the WEDI and ANSI workgroups.

Because of the limitations of existing identifiers, the workgroup designed a new identifier, called the National Provider Identifier (NPI), that would be in the public domain and that would incorporate the recommendations of the WEDI and ANSI workgroups.

As a result of this project, and before legislation required the use of the standard identifier for all health care providers, HCFA and other participants accepted the workgroup's recommendation, and HCFA decided that this new identifier would be implemented in the Medicare program. HCFA began to develop the National Provider System (NPS), which would capture the information necessary to uniquely identify a health care provider, store it in a database called the National Provider File (NPF), and assign an NPI to each uniquely identified health care provider.

The National Provider Identifier (NPI)

The NPI is an 8-position alphanumeric identifier. It contains no embedded intelligence; that is, information about the health care provider, such as the type of health care provider or State where the health care provider is located, is not conveyed by the NPI. While this type of information would be recorded in the NPF, it would not be part of the identifier.

The eighth position of the NPI is a numeric check digit which will assist in identifying erroneous or invalid NPIs. The check digit is a recognized International Standards Organization (ISO) standard. The check digit algorithm must be computed from an all-numeric base number. Therefore, any alpha characters that may be part of the NPI are translated to specific numerics before the calculation of the check digit.

The NPI format would allow for the creation of approximately 20 billion unique identifiers.

The 8-position alphanumeric format was chosen over a longer numeric-only format in order to keep the identifier as short as possible while providing for an identifier pool that would serve the industry's needs for a long time. Some health care providers and health plans might have difficulty in the short term in accommodating alphabetic characters. In order to afford them additional time to accommodate alphabetic characters, the NPS has been designed to issue numeric-only identifiers first and to later introduce alphabetic characters starting with the first position of the NPI.

The Health Insurance Portability and Accountability Act (HIPAA) of 1996

On August 21, 1996, Congress passed the Health Insurance Portability and Accountability Act (HIPAA). HIPAA includes provisions to address the need for a standard health care provider identifier and other standards that would lead to administrative simplification. It mandates the establishment of these standards for use in the following electronic transactions: health claims, health encounter information, health claims attachments, health plan enrollments and disenrollments, health plan eligibility, health care payment and remittance advice, health plan premium payments, first report of injury, health claim status, and referral certification and authorization.

The Secretary of the Department of Health and Human Services (HHS) is charged with adopting the administrative simplification standards. The standards are applicable to health plans and health care clearinghouses that transmit any health information in electronic form in connection with the transactions listed above, and to health care providers that conduct electronically any of those transactions.

HIPAA stipulates the way in which the standards are to have been, or are to be, established, the consultations required, and the dates by which the standards must be set and implemented. HIPAA also gives HHS the authority to impose penalties on providers that conduct electronically any of the transactions listed above, health care clearinghouses, and health plans that delay, do not use, or misuse the standards. The process by which modifications and changes to standards may be made is also contained in this legislation.

HIPAA Requirements for Developing and Adopting Administrative Simplification Standards

In order to comply with HIPAA in establishing the standards, HHS must rely on the recommendations of the National Committee on Vital and Health Statistics (NCVHS), consult with appropriate State, Federal, and private agencies or organizations, and publish the recommendations of NCVHS in the Federal Register.

HHS has organized interdepartmental implementation teams to identify and assess potential standards, including those for a health care provider identifier. A separate team addresses cross-cutting issues and coordinates the work of the implementation teams. The teams consult with NCVHS and standard setting organizations. The teams are charged with developing regulations and other necessary documents and making recommendations for the various standards to the HHS' Data Council. (The Data Council is the focal point for consideration of data policy issues. It reports directly to the Secretary of HHS and advises her on data standards and privacy issues.)

HHS will develop recommendations for the standards to be adopted. The recommendations will be put in the form of Notices of Proposed Rulemaking (NPRMs) and will be published in the Federal Register. Each NPRM provides the public with a 60-day comment period. The public comments will be reviewed and analyzed, and Final Rules will then be published in the Federal Register; the Final Rules will announce the adoption of the standards. In addition, HHS will distribute standards and coordinate preparation and distribution of implementation guides for each one.

Recommendation of the NPI as the Standard for the Health Care Provider Identifier

There is no recognized standard for health care provider identification as defined in the law. HCFA has assessed various options for a provider identifier against the criteria developed by HHS and those in HIPAA. The NPI satisfies all the criteria. None of the other candidates met all the criteria; that is, no standard has been developed, adopted, or modified by a standard setting organization after consultation with the National Uniform Billing Committee, the National Uniform Claim Committee, WEDI, and the American Dental Association. Therefore, we are proposing a new standard.

The NPI is intended to be a universal identifier which can be used to enumerate all types of health care providers, and the supporting data structure incorporates a comprehensive list of provider types developed by an ANSI Accredited Standards Committee X12N workgroup. The NPI would not be proprietary and would be widely available to the industry. The system that would enumerate health care providers would be maintained by HCFA, and data would therefore be safeguarded under the Privacy Act. The system would also incorporate extensive search and duplicate checking routines into the enumeration process.

We will recommend in the NPRM that the NPI be designated as the standard identifier for health care providers. The NPI would be supported by HCFA to assure continuity. The data collection and paperwork burdens on users would be minimal, and the NPI can be used in other standard transactions under HIPAA. Implementation costs per health care provider and per health plan would be relatively low, and we would develop implementation procedures. The NPI would be platform and protocol independent. The NPI is not fully operational, but it is undergoing testing at this time; comprehensive testing will be completed before the identifier is implemented.

In the development of the NPI, we consulted with many organizations, including those required by HIPAA. Subsequently, the NPI has been endorsed by several government and private organizations:

NCVHS
National Uniform Billing Committee
American Dental Association
National Uniform Claim Committee
WEDI
State of Minnesota
Massachusetts Health Data Consortium's Affiliated Health Information Networks of New England
USA Registration Committee
National Council for Prescription Drug Programs

The National Provider System (NPS)

The NPI would be implemented through a central electronic enumerating system, the National Provider System (NPS). This system would be a comprehensive, uniform system for identifying and uniquely enumerating health care providers at the national level, not unlike the process now used to issue Social Security Numbers. Health care providers would not interact directly with the NPS.

General Categories of Health Care Providers to be Enumerated

We will propose in the NPRM, and request comments on, two alternatives for defining the general categories of health care providers for enumeration purposes. The first alternative would categorize health care providers as individuals, groups, or organizations. The second alternative would categorize health care providers as individuals or organizations (groups would be considered organizations). (See the discussion under ***Practice Addresses and Group/Organization Options***.)

Individuals are treated differently than organizations and groups because the data available to search for duplicates (for example, date and place of birth) are different. Organizations and groups may need to be treated differently from each other because it is possible that a group is not specifically licensed or certified to provide health care, whereas an organization usually is. It may, therefore, be important to be able to link the individual members to the group. It would not be possible to distinguish one category from another by looking at the NPI. The NPS would contain the kinds of data necessary to uniquely identify each category of health care provider. Those categories are described as follows:

Individual--A human being who is licensed, certified or otherwise authorized to perform medical services or provide medical care, equipment or supplies in the normal course of business. Examples of individuals are physicians, nurses, dentists, pharmacists, and physical therapists.

Organization--An entity, other than an individual, that is licensed, certified or otherwise authorized to provide medical services, care, equipment or supplies in the normal course of business. The licensure, certification, or other recognition is granted to the organization entity. Individual owners, managers, or employees of the organization may also be certified, licensed, or otherwise recognized as individual health care providers in their own right. Each separate physical location of an organization, each member of an organization chain, and each subpart of an organization that needs to be identified would receive its own NPI. NPIs of organization providers (e.g., hospitals) would not be linked within the NPS to NPIs of other health care providers (e.g., physicians who work in the hospitals). Examples of organizations are hospitals, laboratories, ambulance companies, health maintenance organizations, and pharmacies.

Group--An entity composed of one or more individuals (as defined above), generally created to provide coverage of patients' needs in terms of office hours, professional backup and support, or range of services resulting in specific billing or payment arrangements. It is possible that the group itself is not licensed or certified, but the individual(s) who compose the group are licensed, certified or otherwise authorized to provide health care services. The NPIs of the group member(s) would be linked within the NPS to the NPI of the group. An individual can be a member of multiple groups. Examples of groups are (1) two physicians practicing as a group where they bill and receive payment for their services as a group and (2) an incorporated individual billing and receiving payment as a corporation.

The ownership of a group or organization can change if it is sold, consolidated, or merged, or if control changes due to stock acquisition. In many cases, the nature of the provider itself (for example, its location, staff or types of services provided) is not affected. In general, the NPI of the provider should not change in these situations unless the change of ownership affects the nature of the provider. (Example: If a hospital is acquired and then converted to a rehabilitation center, it would need to obtain a new NPI.) A new NPI would also be needed if a physicians' group practice operating as a partnership dissolves that partnership and another partnership of physicians acquires and operates the practice.

The Enumerators

NPIs would be issued by the NPS based on information entered into the NPS by one or more organizations known as "enumerators." Enumerators would carry out a number of functions, including entering identifying information about a health care provider into the system, performing data validation (for example, confirming the State license number), notifying a health care provider of its NPI, and updating information about a health care provider when notified by the health care provider. (Some of these functions could be redundant and unnecessary if the enumerator were also an entity that enrolls health care providers in its own health plan and would be enumerating health care providers in conjunction with enrolling them in its own health plan.) The NPS would edit the data, checking for consistency, formatting addresses, and validating the Social Security Number. It would then search the database to determine whether the health care provider already has an NPI. If so, that NPI would be displayed. If not, an NPI would be assigned. If the health care provider is similar (but not identical) to an already-enumerated health care provider, the information would be passed back to the enumerator as a possible match for further analysis. The number of enumerators would be limited in the interest of data quality and consistency.

Each health care provider would be required to forward updates to its own data in the database to an NPI enumerator within 60 days of the date the change occurs. The NPRM will solicit comments as to whether updates should be for the information needed to uniquely identify a provider (e.g., name, address) or for any of the information that was collected about a provider (e.g., certification information).

The process of uniquely identifying and enumerating health care providers is separate from--but may be similar to--the process health plans follow in enrolling providers in their health programs. Even when the NPS begins assigning NPIs to health care providers, health plans would still have to follow their own procedures for receiving and verifying information from providers that apply to them for enrollment in their health programs. Unique enumeration is less expensive than plan enrollment because it does not require as much information to be collected, edited, and validated.

Because the Medicare program maintains files on more health care providers than any other health plan in the country, we envision using data from those files to initially populate the National Provider File that would be built by the NPS and accessed by the enumerator(s).

The major issue related to the operation of the enumeration process is determining who the enumerator(s) will be. Several choices are listed below, along with their advantages and disadvantages:

- **A registry:**

A central registry operated under Federal direction would enumerate all health care providers. The Federally-directed registry could be a single physical entity or could be a number of agents controlled by a single entity and operating under common procedures and oversight.

For: The process would be consistent; centralized operation would assure consistent data quality; the concept of a registry is easy to understand (single source for identifiers).

Against: The cost of creating a new entity rather than enumerating as part of existing functions (for example, plan enrollment) would be greater than having existing entities enumerate; there may be redundant data required for enumeration and enrollment in a health plan.

- **Private organization(s):**

A private organization(s) that meets certain selection criteria and performance standards, which would post a surety bond related to the number of health care providers enumerated, could enumerate health care providers.

For: The organization(s) would operate in a consistent manner under uniform requirements and standards; failure to maintain prescribed requirements and standards could result in penalties which could include suspension or debarment from being an enumerator.

Against: A large number of private enumerators would compromise the quality of work and be more difficult to manage; the administrative work required to set up arrangements for a private enumerator(s) may be significant; the cost of creating a new entity rather than enumerating as part of existing functions (for example, plan enrollment) would be greater than having existing entities enumerate; there may be redundant data required for enumeration and enrollment in a health plan; the legality of privatization would need to be researched.

(Note: If private organizations as enumerators could charge health care providers a fee for obtaining NPIs, this enumeration option would be attractive and more preferable than the other choices or combinations, as it would offer a way to fund the enumeration function. In researching the legality of this approach, however, we were advised that we do not have the authority under current law to (1) charge health care providers a fee for obtaining NPIs, or (2) license private organizations that would charge health care providers for NPIs. For these reasons, we will not present as a viable option in the NPRM the use of private organizations as enumerators.)

- **Federal health plans and Medicaid State agencies:**

Federal programs named as health plans and Medicaid State agencies would enumerate all health care providers. (As stated earlier under the definition of "health plan", the Federal Employees Health Benefits Program is comprised of numerous health plans, rather than just one, and does not deal directly with health care providers that are not also health plans. Thus, the program would not enumerate health care providers but would still require the NPI to be used.)

For: These health plans already assign numbers to their health care providers; a large percentage of health care providers do business with Federal health plans and Medicaid State agencies; there would be no appreciable costs for these health plans to enumerate as part of their enrollment process; a small number of enumerators would assure consistent data quality.

Against: Not all health care providers do business with any of these health plans; there would be the question of which health plan would enumerate the health care provider that participates in more than one; we estimate that approximately 5 percent of the State Medicaid agencies may decline to take on this additional task.

- **Designated State agency:**

The Governor of each State would designate an agency to be responsible for enumerating health care providers within the State. The agency might be the State Medicaid agency, State licensing board, health department, or some other organization. Each State would have the flexibility to develop its most workable approach.

For: This choice would cover all health care providers; there would be a single source of enumeration in each State; States could devise the least expensive mechanisms (for example, assign NPI during licensing); license renewal cycles would assure periodic checks on data accuracy.

Against: This choice would place an unfunded workload on States; States may decline to designate an agency; there may be insufficient funding to support the costs the States would incur; State licensing agencies may not collect enough information during licensing to ensure uniqueness across States; States may not be uniform in their definitions of "providers."

- **Professional organizations or training programs:**

We would enlist professional organizations to enumerate their members and/or enable professional schools to enumerate their students.

For: Individuals could be enumerated at the beginning of their careers; most health care providers either attend a professional school or belong to an organization.

Against: Not all health care providers are affiliated with an organization or school; this choice would result in many enumerators and thus potentially lower the data quality; schools would not be in a position to update data once the health care provider has graduated; the choice would place an unfunded workload on schools and/or organizations.

- **Health plans:**

Health plans in general would have access to the NPS to enumerate any of their health care providers.

For: Most health care providers do business with one or more health plans; there would be a relatively low cost for health plans to enumerate as part of enrollment; this choice would eliminate the need for redundant data.

Against: Not all health care providers are affiliated with a health plan; this choice would be confusing for the health care provider in determining which health plan would enumerate when the health care provider is enrolled in multiple health plans; there would be a very large number of enumerators and thus potentially serious data quality problems; the choice would place unfunded workload on health plans.

- **Combinations:**

We also considered using combinations of these choices to maximize advantages and minimize disadvantages.

The two most viable options are described below. We will solicit input on these options, as well as on alternate solutions, in the NPRM.

Option 1: Registry enumeration of all health care providers.

All health care providers would apply directly to a Federally-directed registry for an identifier. The registry would be operated by an agent or contractor. This option is favored by some health plans, which believe that a single entity should be given the task of enumerating health care providers and maintaining the database for the sake of consistency. It would also be the simplest option for providers, since enumeration activities would be carried out for all providers by a single entity. The major drawback to this option is the high cost of establishing a registry large enough to process enumeration and update requests for the 1.2 million current and 30,000 new (annually) providers who conduct HIPAA transactions. The statute did not provide a funding mechanism for the enumeration/update function. Federal funds, if available, would have to support this function.

This option does not offer a clear possibility for funding some of the costs associated with the operation and maintenance of the National Provider System (NPS) once it becomes national in scope (that is, enumerates health care providers that are not Medicare health care providers). In the NPRM, we will solicit comments on alternatives for funding the NPS.

Option 2: A combination of Federal programs (health plans), Medicaid State agencies, and a registry.

Federal programs and Medicaid State agencies would enumerate their own health care providers. Each health care provider participating in more than one health plan could choose the health plan by which it

wishes to be enumerated. All other health care providers would be enumerated by a Federally-directed registry. These latter health care providers would apply directly to the registry for an identifier.

The number of enumerators, and the number of health care providers per enumerator, would be small enough to ensure careful validation of data. Moreover, enumerators (aside from the registry) would be dealing with their own health care providers, an advantage both in terms of cost equity and data quality. This option recognizes the fact that Federal programs and Medicaid State agencies already assign identifiers to their providers for their own programmatic purposes. It would standardize those existing processes and, in some cases, may increase the amount of data collected or validation performed.

We have concluded that the cost of concurrently enumerating and enrolling a Medicare provider is essentially the same as the cost of enrollment alone because of the high degree of redundancy between the processes. While there would probably be additional costs initially, they would be offset by savings in other areas (e.g., simplified, more efficient coordination of benefits; single enumeration of a health care provider; maintenance of only one identification number for a health care provider; maintenance of only one health care provider enumeration system).

The Federal Government is responsible for 75 percent of Medicaid State agency costs to enumerate and update health care providers. Because we believe the costs that would be incurred by Medicaid State agencies in enumerating and updating their own health care providers would be relatively low and offset by savings, we see no tangible costs involved.

Allowing these health plans to continue to enumerate their health care providers would reduce the registry workload and its operating costs. We estimate that approximately 85 percent of billing health care providers transact business with a Medicaid State agency or a Federal health plan. We estimate that 5 percent of Medicaid State agencies may decline to enumerate their health care providers. If so, that work would have to be absorbed by the registry. This expense could be offset by the discontinuance of the Unique Physician Identification Number (UPIN) registry, which is currently maintained with Federal funds. (The UPIN registry assigns, for the use of the Medicare program, an identification number to physicians and certain other health care providers.)

We will solicit comments in the NPRM on the number of health care providers that would deal directly with a registry under this option and on alternative ways to enumerate them.

As with option 1, this option does not offer a clear possibility for funding some of the costs associated with the operation and maintenance of the NPS as it becomes national in scope. Again, in the NPRM, we will solicit comments on alternatives for funding the NPS.

Which Enumeration Option Do We Prefer?

We believe that option 2 is more advantageous and less costly than option 1. Option 1 is the simplest for health care providers to understand but has a significant budgetary impact. Option 2 takes advantage of existing expertise and processes to enumerate the majority of health care providers. This reduces the cost of the registry in option 2 to a point where it would be largely offset by savings from eliminating redundant enumeration processes.

Financing the Enumeration of Providers

Because the statute did not provide a funding mechanism for the enumeration process, Federal funds, if available, would be required to finance this function. The NPRM will solicit comments on any burdens that various financing options might pose on the industry.

While the NPS has been developed to date with Federal funds, issues remain as to sources of future funding as the NPS becomes national in scope.

Enumerating Providers in Phases

Enumeration should occur in phases because the number of potential health care providers to be enumerated is too large to enumerate at one time, regardless of the number of enumerators. Below are the phases we will recommend, described in the context of option 2:

Health care providers that participate in Medicare would be enumerated first because, as the managing entity, HCFA has data readily available for all Medicare providers. Health care providers that are already enrolled in Medicare at the time of implementation would be enumerated based on existing Medicare provider databases that have already been reviewed and validated. These health care providers would not have to request an NPI -- they would automatically receive one. After this initial enumeration, new health care providers not yet enumerated that wish to participate in Medicare would receive an NPI as a part of the enrollment process.

Secondly, Medicaid and non-Medicare Federal health programs that need to enumerate their health care providers would follow a similar process, based on a mutually agreed-upon timetable. Again, existing pre-validated databases from the health plans could be used to avoid requiring large numbers of health care providers to apply for NPIs. If a health care provider were already enumerated by Medicare, that NPI would be communicated to the second program. After the initial enumeration, new health care providers that wish to participate in Medicaid or a Federal program other than Medicare would receive an NPI as a part of that enrollment process. Health care providers that transact business with more than one such health program would be enumerated by the health program to which they apply first. This phase would be completed within 2 years after the effective date of the final rule.

Concurrent with the second enumeration phase (described above), health care providers that do not transact any business with Federal health plans or Medicaid, but that do conduct electronically any of the transactions stipulated in HIPAA, would be enumerated by the Federally-directed registry. These health care providers would have to apply for an NPI.

After the first two phases of enumeration are completed, the remaining health care providers would be enumerated by the Federally-directed registry. This would be the third phase of enumeration. The health care providers to be enumerated in this phase are those that do not conduct electronically any of the transactions stipulated in HIPAA. In some cases, these health care providers may need to be enumerated because health plans may prefer to use the NPI for all health care providers, whether or not they submit HIPAA transactions electronically, for the sake of processing efficiency. In addition, some health care providers may wish to be enumerated even though they conduct no designated transactions and are not affiliated with any health plan. These health care providers would not be enumerated until all the health care providers requiring NPIs (i.e., those that conduct electronically any of the transactions specified by HIPAA) are enumerated.

In response to industry comments, most notably from WEDI, we may include some proposals for the 2-year implementation phase (3-year phase for small plans) for the NPI: (1) To allow health care providers, health plans, and health care clearinghouses the time needed to plan, test, and implement the NPI, the NPI should not be required to be used during the first year following its adoption; that is, those entities will have the first year following adoption to adequately ready themselves for mandatory usage, which will occur during the second year following adoption, but no later than the end of the second year (or third year for small plans). This proposal, if included, would not preclude willing trading partners from implementing the NPI at any time during the 2 years following its adoption (3 years for small plans). (2) In addition, health plans would give health care providers at least 6 months' advance notice of when usage of the NPI will be required. Plans will notify health care providers through their normal communications procedures.

Information Contained in the National Provider File (NPF)

The NPS would collect and store in the National Provider File (NPF) a variety of information about a health care provider, as shown in the table below. We believe the majority of this information is used to uniquely identify the provider. Other information is used for administrative purposes, and a few of the data elements are collected at the request of potential users who have been working with HCFA in designing the database prior to the passage of HIPAA. All of these data elements represent only a fraction of the information that would comprise a health care provider enrollment file. The data elements in the table, plus cease/effective/termination dates, switches (yes/no), indicators, and history, are being considered as those that would form the NPF. We have included comments, as appropriate. The table does not display systems maintenance or similar fields, or provider cease/effective/termination dates.

National Provider File
Data Elements

KEY: **I** - Used for the identification of a provider.
A - Used for administrative purposes.
U - Included at the request of potential users (optional).

Data Elements	Comments	Purpose
National Provider Identifier (NPI)	8-position alpha-numeric NPI assigned by the NPS.	I
Provider's current name	For Individuals only. Includes first, middle, and last names.	I
Provider's other name	For Individuals only. Includes first, middle, and last names. Other names might include maiden and professional names.	I
Provider's legal business name	For Groups and Organizations only.	I
Provider's name suffix	For Individuals only. Includes Jr., Sr., II, III, IV, and V.	I

Provider's credential designation	For Individuals only. Examples are MD, DDS, CSW, CNA, AA, NP, RNA, PSY.	I
Provider's Social Security Number (SSN)	For Individuals only.	I
Provider's Employer Identification Number (EIN)	Employer Identification Number.	I
Provider's birth date	For Individuals only.	I
Provider's birth State code	For Individuals only.	I
Provider's birth county name	For Individuals only.	I
Provider's birth country name	For Individuals only.	I
Provider's sex	For Individuals only.	I
Provider's race	For Individuals only.	U
Provider's date of death	For Individuals only.	I
Provider's mailing address	Includes 2 lines of street address, plus city, State, county, country, 5- or 9-position ZIP code.	A
Provider's mailing address telephone number		A
Provider's mailing address fax number		A
Provider's mailing address e-mail address		A
Resident/Intern code	For certain Individuals only.	U
Provider enumerate date	Date provider was enumerated (assigned an NPI). Assigned by the NPS.	A
Provider update date	Last date provider data was updated. Assigned by the NPS.	A
Establishing enumerator/agent number	Identification number of the establishing enumerator.	A
Provider practice location identifier (location code)	2-position alpha-numeric code (location code) assigned by the NPS.	I

Provider practice location name	Title (e.g., “doing business as” name) of practice location.	I
Provider practice location address	Includes 2 lines of street address, plus city, State, county, country, 5- or 9-position ZIP code.	I
Provider’s practice location telephone number		A
Provider’s practice location fax number		A
Provider’s practice location e-mail address		A
Provider classification	From Accredited Standards Committee X12N taxonomy. Includes type(s), classification(s), area(s) of specialization.	I
Provider certification code	For certain Individuals only.	U
Provider certification (certificate) number	For certain Individuals only.	U
Provider license number	For certain Individuals only.	I
Provider license State	For certain Individuals only.	I
School code	For certain Individuals only.	I
School name	For certain Individuals only.	I
School city, State, country	For certain Individuals only.	U
School graduation year	For certain Individuals only.	I
Other provider number type	Type of provider identification number also/formerly used by provider: UPIN, NSC, OSCAR, DEA, Medicaid State, PIN, Payer ID.	I
Other provider number	Other provider identification number also/formerly used by provider.	I
Group member name	For Groups only. Name of Individual member of group. Includes first, middle, and last names.	I
Group member name suffix	For Groups only. This is the Individual member’s name suffix. Includes Jr., Sr., II, III, IV, and V.	I

Organization type control code	For certain Organizations only. Includes Government - Federal (Military), Government - Federal (Veterans), Government - Federal (Other), Government - State/County, Government - Local, Government - Combined Control, Non-Government - Non-profit, Non-Government - For Profit, and Non-Government - Not for Profit.	U

We need to consider the benefits of retaining all of the data elements shown in the table versus lowering the cost of maintaining the database by keeping only the minimum number of data elements needed for unique provider identification. The NPRM will solicit input on the compsotion of the minimum set of data elements needed to uniquely identify each type of provider. In order to consider the inclusion or exclusion of data elements, we need to assess their purpose and use.

The data elements with a purpose of "I" are being proposed to identify a health care provider, either in the search process (which is electronic) or in the investigation of health care providers designated as possible matches by the search process. These data elements are critical because unique identification is the keystone of the NPS.

The data elements with a purpose of "A" are not essential to the identification processes mentioned above, but nonetheless are valuable. Certain "A" data elements can be used to contact a health care provider for clarification of information or resolution of issues encountered in the enumeration process and for sending written communications; other "A" data elements (e.g., Provider Enumerate Date, Provider Update Date, Establishing Enumerator/Agent Number) are used to organize and manage the data.

Data elements with a purpose of "U" are collected at the request of potential users of the information in the system. While not used by the system's search process to uniquely identify a health care provider, Race is nevertheless valuable in the investigation of health care providers designated as possible matches as a result of that process. In addition, Race is important to the utility of the NPS as a statistical sampling frame. Race is collected "as reported"; that is, it is not validated. It is not maintained, only stored. The cost of keeping this data element is virtually nil. Other data elements (Resident/Intern Code, Provider Certification Code and Number, and Organization Type Control Code) with a purpose of "U", while not used for enumeration of a health care provider, have been requested to be included by some members of the health care industry for reports and statistics. These data elements are optional and do not require validation; many remain constant by their nature; and the cost to store them is negligible.

The data elements that we judge will be expensive to either validate or maintain (or both) are the license information, provider practice location addresses, and membership in groups. The NPRM will solicit comments on whether these data elements are necessary for the unique enumeration of providers and whether validation or maintenance is required for that purpose.

Licenses may be critical in determining uniqueness of a health care provider (particularly in resolving identities involving compound surnames) and are, therefore, considered to be essential by some. License information is expensive to validate initially, but not expensive to maintain because it does not change frequently.

The practice location addresses can be used to aid in investigating possible provider matches, in converting existing provider numbers to NPIs, and in research involving fraud or epidemiology. Location codes, which are discussed in detail in ***Practice Addresses and Group/Organization Options*** (below), could be assigned by the NPS to point to and identify practice locations of individuals and groups. Some potential users felt that practice addresses changed too frequently to be maintained efficiently at the national level. The average Medicare physician has two to three addresses at which he/she practices. Group providers may have many more practice locations. We estimate that 5 percent of health care providers require updates annually, and that addresses are one of the most frequently changing attributes. As a result, maintaining more than one practice address for a health care provider on a national scale could be burdensome and time consuming. Many potential users believe that practice addresses could more adequately be maintained at local, health-plan specific levels.

Some potential users felt that membership in groups was useful in identifying health care providers. Many others, however, felt that these data are highly volatile and costly to maintain. These users felt it was unlikely that membership in groups could be satisfactorily maintained at the national level.

The NPRM will solicit comments on the data elements proposed for the NPF, input on the usefulness/tradeoffs of the data elements, and suggestions on how the enumeration process might be improved to prevent issuance of multiple NPIs to a health care provider.

Practice Addresses and Group/Organization Options

We have had extensive consultations with health care providers, health plans, and members of health data standards organizations on the requirements for provider practice addresses and the group and organization structures in the NPS. Here are the major questions:

- Should the NPS capture practice addresses of health care providers?

  For: Practice addresses could aid in non-electronic matching of health care providers and in conversion of existing provider number systems to NPIs. They could be useful for research specific to practice location; for example, involving fraud or epidemiology.

  Against: Practice addresses would be of limited use in the electronic identification and matching of health care providers. The large number of practice locations of some group providers, the frequent relocation of provider offices, and the temporary situations under which a health care provider may practice at a particular location would make maintenance of practice addresses burdensome and expensive.

- Should the NPS assign a location code to each practice address in a health care provider's record? The location code would be a 2-position alphanumeric data element. It would be a data element in the NPS but would not be part of the NPI. It would point to a certain practice address in the health care provider's record and would be usable only in conjunction with that health care provider's NPI. It would not stand alone as a unique identifier for the address.

  For: The location code could be used to designate a specific practice address for the health care provider, eliminating the need to perform an address match each time the address is retrieved. The location code might be usable, in conjunction with a health care provider's NPI, as a designation for service location in electronic health transactions.

  Against: Location codes should not be created and assigned nationally unless required to support standard electronic health transactions; this requirement has not been demonstrated. The format of the location code would allow for a lifetime maximum of 900 location codes per health care provider; this

number may not be adequate for groups with many locations. The location code would not uniquely identify an address; different health care providers practicing at the same address would have different location codes for that address, causing confusion for business offices that maintain data for large numbers of health care providers.

• Should the NPS link the NPI of a group provider to the NPIs of the individual providers who are members of the group?

For: Linkage of the group NPI to individual members' NPIs would provide a connection from the group provider, which is possibly not licensed or certified, to the individual members who are licensed, certified or otherwise authorized to provide health care services.

Against: The large number of members of some groups and the frequent moves of individuals among groups would make national maintenance of group membership burdensome and expensive. Organizations that need to know group membership prefer to maintain this information locally, so that they can ensure its accuracy for their purposes.

• Should the NPS collect the same data for organization and group providers? There would be no distinction between organization and group providers. Each health care provider would be categorized in the NPS either as an individual or as an organization. Each separate physical location or subpart of an organization that needed to be identified would receive its own NPI. The NPS would not link the NPI of an organization provider to the NPI of any other health care provider, although all organizations with the same employer identification number (EIN) or same name would be retrievable via a query on that EIN or name.

For: The categorization of health care providers as individuals or organizations would provide flexibility for enumeration of integrated provider organizations. Eliminating the separate category of group providers would eliminate an artificial distinction between groups and organizations. It would eliminate the possibility that the same entity would be enumerated as both a group and an organization. It would eliminate any need for location codes for groups. It would allow enumeration at the lowest level that needs to be identified, offering flexibility for enumerators, health plans or other users of NPS data to link organization NPIs as they require in their own systems.

Against: A single business entity could have multiple NPIs, corresponding to its physical locations or subparts.

Possible Alternatives Relating to Practice Addresses and Group/Organization Structures:

Below are two alternatives which illustrate how answers to the questions posed above would affect enumeration and health care provider data in the NPS. The results would depend upon whether the health care provider is an individual, organization, or group.

Alternative 1:

The NPS would capture practice addresses. It would assign a location code for each practice address of an individual or group provider. Organization and group providers would be distinguished and would have different associated data in the NPS. Organization providers could have only one location per NPI and could not have individuals listed as members. Group providers could have multiple locations with location codes per NPI and would have individuals listed as members.

For individual providers, the NPS would capture each practice address and assign a corresponding location code. The NPS would link the NPIs of individuals who are listed as members of a group with the NPI of their group.

For organization providers, the NPS would capture the single active practice address. It would not assign a corresponding location code.

For group providers, the NPS would capture each practice address and assign a corresponding location code. The NPS would link the NPI of a group with the NPIs of all individuals who are listed as members of the group. A group location would have a different location code in the members' individual records and the group record.

Alternative 2:
The NPS would capture only one practice address for an individual or organization provider. It would not assign location codes. The NPS would not link the NPI of a group provider to the NPIs of individuals who are members of the group. Organization and group providers would not be distinguished from each other in the NPS. Each health care provider would be categorized as either an individual or an organization.

For individual providers, the NPS would capture a single practice address. It would not assign a corresponding location code.

For organization providers, each separate physical location or subpart that needed to be identified would receive its own NPI. The NPS would capture the single active practice address of the organization. It would not assign a corresponding location code.

Recent consultations with health care providers, health plans, and members of health data standards organizations have indicated a growing consensus for alternative 2 discussed above. Representatives of these organizations feel that alternative 2 will provide the data needed to identify the health care provider at the national level, while reducing burdensome data maintenance associated with provider practice location addresses and group membership. The NPRM will solicit comments on these and other alternatives for collection of practice location addresses and assignment of location codes, and on the group and organization provider data within the NPS.

Dissemination of Information from the National Provider File

Information will be made available from the NPS so that the administrative simplification provisions of HIPAA can be implemented smoothly and eficiently. In addition to a health care provider's name and NPI, it is important to make available other inormation about the health care provider so that people with existing health care provider files can associate their health care providers with the appropriate NPIs. The data elements we would propose to disseminate are the ones that our research has shown will be the most beneficial in this matching process, without violating the Privacy Act provisions. The information needs to be disseminated to the widest possible audience because the NPIs would be used in a vast number of applications throughout the health care industry.

We propose to charge fees for the dissemination of such items as publicly availabledata files and directories, but the fees would not exceed the costs of the dissemination.

For purposes of disseminating information from the NPF, we recommend the establishment of two levels of users. This is necessary because some of the information being collected in order to enumerate providers is confidential in nature and, as such, can only be released under the conditions of the Privacy Act.

Level I - Enumerators

Access to the NPS would be limited to the approved enumerators. Routine uses for the data concerning individuals would be published in a Privacy Act System of Records Notice.

Enumerators would have access to all data elements for all health care providers in order to accurately resolve potential duplicate situations (that is, the health care provider may already have been enumerated). Enumerators would be required to protect the privacy of the data in accordance with the Privacy Act.

Enumerators would have access to the on-line NPS and would also receive periodic batch update files from HCFA.

Level II - The Public

Selected data elements would be available to the public (which includes individuals, health care providers, software vendors, health plans that are not enumerators, and clearinghouses).

The table below lists the data comprising the NPF and indicates the dissemination level (Level I or Level II).

Dissemination of Information from the National Provider File

Data Elements	Dissemination Level	Comments
National Provider Identifier (NPI)	I and II	8-position alpha-numeric NPI assigned by the NPS.
Provider's current name	I and II	For Individuals only. Includes first, middle, and last names.
Provider's other name	I and II	For Individuals only. Includes first, middle, and last names. Types of other names include maiden and professional.
Provider's legal business name	I and II	For Groups and Organizations only.
Provider's name suffix	I and II	For Individuals only. Includes Jr., Sr., II, III, IV, and V.
Provider's credential designation	I and II	For Individuals only. Examples are MD, DDS, CSW, CNA, AA, NP, RNA, PSY.
Provider's Social Security Number (SSN)	I only	For Individuals only.
Provider's Employer Identification Number (EIN)	I only	Employer Identification Number.
Provider's birth date	I only	For Individuals only.
Provider's birth State code	I only	For Individuals only.

Provider's birth county name	I only	For Individuals only.
Provider's birth country name	I only	For Individuals only.
Provider's sex	I only	For Individuals only.
Provider's race	I only	For Individuals only.
Provider's date of death	I only	For Individuals only.
Provider's mailing address	I and II	Includes 2 lines of street address, plus city, State, county, country, 5- or 9-position ZIP code.
Provider's mailing address telephone number	I only	
Provider's mailing address fax number	I only	
Provider's mailing address e-mail address	I only	
Resident/Intern code	I and II	For certain Individuals only.
Provider enumerate date	I and II	Date provider was enumerated (assigned an NPI). Assigned by the NPS.
Provider update date	I and II	Last date provider data was updated. Assigned by the NPS.
Establishing enumerator/agent number	I only	Identification number of the establishing enumerator.
Provider practice location identifier (location code)	I and II	2-position alpha-numeric code (location code) assigned by the NPS.
Provider practice location name	I and II	Title (e.g., "doing business as" name) of practice location.
Provider practice location address	I and II	Includes 2 lines of street address, plus city, State, county, country, 5- or 9-position ZIP code.
Provider's practice location telephone number	I only	

Provider's practice location fax number	I only	
Provider's practice location e-mail address	I only	
Provider classification	I and II	From Accredited Standards Committee X12N taxonomy. Includes type(s), classification(s), area(s) of specialization.
Provider certification code	I only	For certain Individuals only.
Provider certification (certificate) number	I only	For certain Individuals only.
Provider license number	I only	For certain Individuals only.
Provider license State	I only	For certain Individuals only.
School code	I only	For certain Individuals only.
School name	I only	For certain Individuals only.
School city, State, country	I only	For certain Individuals only.
School graduation year	I only	For certain Individuals only.
Other provider number type	I and II	Type of provider identification number also/formerly used by provider: UPIN, NSC, OSCAR, DEA, Medicaid State, PIN, Payer ID.
Other provider number	I and II	Other provider identification number also/formerly used by provider.
Group member name	I and II	For Groups only. Name of Individual member of group. Includes first, middle, and last names.
Group member name suffix	I and II	For Groups only. This is the Individual member's name suffix. Includes Jr., Sr., II, III, IV, and V.

Organization type control code	I and II	For certain Organizations only. Includes Government - Federal (Military), Government - Federal (Veterans), Government - Federal (Other), Government - State/County, Government - Local, Government - Combined Control, Non-Government - Non-profit, Non-Government - For Profit, and Non-Government - Not for Profit.

Clearly, the access method to the public data would have to be electronic in order to support the more frequent users. The NPRM will solicit comments on exactly what should be available in hardcopy, what types of electronic formats are necessary (for example, diskette, CD ROM, tape, cartridge, and via Internet), and frequency of update. We anticipate making these data as widely available as feasible.

We initially envisioned limiting access to the second level to health plans and other entities involved in electronic transactions and adding a third level of access, which would make a more abbreviated data set available to the general public. This was in keeping with the past policy of not disclosing physicians' practice addresses. Recent court decisions and our broader goal of beneficiary education caused us to favor a broader data dissemination strategy.

Uses of the NPI

The law requires that the appropriate uses of the NPI be specified. Two years after adoption of this standard (3 years for small health plans) the NPI must be used generally in the health care system and specifically in connection with the health-related financial and administrative transactions identified in HIPAA. The NPI may be used in several other ways: (1) as a cross reference in health care provider fraud and abuse files and other program integrity files (for example, the HHS Office of the Inspector General sanction file); (2) for any other lawful activity requiring individual identification of health care providers, including activities related to the Debt Collection Improvement Act of 1996 and the Balanced Budget Act of 1997; (3) by health care providers to identify themselves in health care transactions or related correspondence (4) by health care providers to identify other health care providers as necessary to complete health care transactions and on related correspondence; (5) by health care providers on prescriptions (however, the NPI could not replace the DEA number or State license number where either of those numbers is required on prescriptions); (6) by health plans in their internal provider files to process transactions and in communications with health care providers (7) by health plans to communicate with other health plans for coordination of benefits; (8) by health care clearinghouses in their internal files to create and process standard transactions and in communications with health care providers and health plans; (9) to identify treating health care providers in patient medical records.

The Effect of the Implementation of the NPI on Providers, Health Plans, and Clearinghouses

We summarize here how the implementation of the NPI would affect health care providers, health plans, and health care clearinghouses if enumeration option 2 were selected. Differences that would result from selection of enumeration option 1 are noted parenthetically.

Health care providers

Health care providers interacting with Medicare, another Federal program, or a Medicaid State agency would receive their NPIs from the NPS via that program and would be required to use their NPIs on all the specified electronic transactions. Each program would establish its own schedule for adopting the NPI, within the time period specified by the law. Whether a given program would automatically issue the NPIs or require the health care providers to apply for them would be up to the program. (For example, HCFA would issue NPIs automatically to currently enrolled Medicare providers and suppliers; data on future health care providers and suppliers would be collected on an enrollment application.)

The health care providers would be required to update data collected from them by submitting changes to the Federal program or Medicaid State agency within 60 days of the change. Health care providers that transact business with multiple programs could report changes to any one of them. (Selection of enumeration option 1 would mean that the health care provider would obtain the NPI from, and report changes to, the Federally-directed registry.)

Health care providers that conduct electronic transactions but do not do so with Federal health programs or Medicaid would receive their NPIs from the NPS via the Federally-directed registry and would be required to use their NPIs on all the specified electronic transactions. Each health plan would establish its own schedule for adopting the NPI, within the time period specified by the law. The health care providers would be required to update data originally collected from them by submitting changes within 60 days of the change to the Federally-directed registry.

Health care providers that are not covered by the above categories would not be required to obtain an NPI. If they wished to do so, they could apply to the Federally-directed registry, but they would not be assigned an NPI until those health care providers that currently conduct electronic transactions with any health plans have received their NPIs. The health care providers would be required to update data originally collected from them by submitting changes within 60 days of the change to the Federally-directed registry.

Health plans

Medicare, other Federal health programs, and Medicaid would be responsible for obtaining NPIs from the NPS and issuing them to their health care providers. They would be responsible for updating the data base with data supplied by their health care providers. (Selection of enumeration option 1 would mean that Medicare, other Federal health programs, and Medicaid would not enumerate health care providers or update their data.)

These government health programs would establish their own schedule for adopting the NPI, within the time period specified by the law.

Each remaining health plan would be required to use the NPI to identify health care providers in electronic transactions as provided by the statute. Each health plan would establish its own schedule for adopting the NPI, within the time period specified by the law.

Health care clearinghouses

Health care clearinghouses would be required to use a health care provider's NPI on electronic standard transactions requiring an NPI that are submitted on the health care provider's behalf.